

1 ABSTRACT OF THE DISCLOSURE

2 A curable adhesive composition is provided which comprises an
3 epoxy terminated silane. A thin profile battery and a substrate to
4 which the thin profile battery is to be conductively connected are also
5 provided. The curable adhesive composition is interposed between the
6 thin profile battery and the substrate. It is cured into an electrically
7 conductive bond electrically interconnecting the battery and the substrate.
8 In another aspect, the invention includes a method of conductively
9 interconnecting electronic components using a curable adhesive
10 composition which comprises an epoxy terminated silane. The invention
11 in another aspect includes interposing a curable epoxy composition
12 between first and second electrically conductive components to be
13 electrically interconnected. At least one of the components comprises
14 a metal surface with which the curable epoxy is to electrically connect.
15 The epoxy is cured into an electrically conductive bond electrically
16 interconnecting the first and second components. The epoxy has an
17 effective metal surface wetting concentration of silane to form a cured
18 electrical interconnection having a resistance through said metal surface
19 of less than or equal to about 0.3 ohm-cm^2 . In another aspect, a
20 battery powerable apparatus includes a conductive adhesive mass
21 comprising an epoxy terminated silane between a battery and substrate.
22 A radio frequency communication device is one example. In another
23 aspect, the invention includes an electric circuit comprising first and
24 second electric components electrically connected with one another

